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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,130	01/09/2001	Yoram Harth	P-1794-US	6520

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Eitan, Pearl, Latzer & Cohen-Zedek  
One Crystal Park, Suite 210  
2011 Crystal Drive  
Arlington, VA 22202-3709

EXAMINER

JOHNSON III, HENRY M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 07/12/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/756,130

Applicant(s)

HARTH ET AL.

Examiner

Henry M Johnson, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 6/17/2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,9,15-20 and 37-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9,15-20 and 37-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Prior Rejections or Objections***

The following comments pertain to the rejections in the most recent Office Action, Paper No. 5, mailed on March 15, 2002. The rejections are maintained and claim 4, originally objected to and now included in amended claim 1, after further review, is rejected under 35 USC § 102 as being unpatentable over U.S. Patent 4,930,504 to Diamantopoulos et al.

***Claim Objections***

Claim 1 is objected to because of the following informalities: the word shaping is incorrect in line 7. Appropriate correction is required. Suggest it be replaced by -- shape--.

Claim 6 is objected to because of the following informalities: the word having is incorrect in line 7. Appropriate correction is required. Suggest it be replaced by -- has--.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5-7, 9, 15-20 and 37-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "wherein one spectral band" in line 5. There is insufficient antecedent basis for this limitation in the claim. Suggest -- said at least -- be inserted following wherein and before one. ✓

Claim 2 recites the limitation "wherein one spectral band" in line 5. There is insufficient antecedent basis for this limitation in the claim. Suggest -- said at least -- be inserted following wherein and before one.

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Claim 2 is rejected as having an improper Markush group in the claim. Suggest "a group" be replaced by -- the group--.

Claim 7 recites the limitation "the illuminated" in line 1. There is insufficient antecedent basis for this limitation in the claim. Suggest "the illuminated" has been deleted and -- an illuminated --

Regarding claim 15, line 1, "further comprising" is indefinite as it is not clear if the new elements replace the optical system of claim 1 or complement it. Suggest replacing "further comprising" with -- wherein the optical system further comprises --.

Claim 15 is rejected as having an improper Markush group in the claim. Suggest "of a group" be replaced by -- selected from the group --.

Claim 15 recites the limitation "said light source illumination" in line 4. There is insufficient antecedent basis for this limitation in the claim. Suggest replacing with -- said light emitted from said light source --.

Regarding claim 18, it is not clear if the new elements replace the optical system of claim 1 or complement it. Suggest using -- The apparatus of claim 1, wherein the optical system further comprises at least one reflector, said reflector is selected from the group consisting of an elliptical cross-section cylindrical reflector, parabolic cross-section cylindrical reflector and an asymmetric aspheric reflector for collecting and further projecting said light emitted from said at least one light source --.

Regarding claim 19, it is not clear if the new elements replace the optical system of claim 1 or complement it. Suggest using -- The apparatus of claim 1, wherein the optical system further comprises a set of two orthogonal cylindrical lenses for collecting and further collimating said light emitted from said at least one light source --.

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Claim 44 recites the limitation "the illuminated" in line 1. There is insufficient antecedent basis for this limitation in the claim. Suggest "the illuminated" be replaced with -- an illuminated. ✓

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, and 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,930,504 to Diamantopoulos et al. Diamantopoulos et al discloses a device for biostimulation of tissue using at least one light source in the visible range of 400-700 nm (Col. 5, line 20), which includes a control unit (Fig. 4). The light source can be an LED or other laser diodes (Col. 6, lines 17-45) all of which have a translucent cover which is considered an optical component. The control unit can vary the frequency (Col. 4, line 38). Diamantopoulos et al teaches power densities from 10 mW/cm<sup>2</sup> to up to 120 mW/cm<sup>2</sup> (Col. 9, lines 24, 33 and 44) which are interpreted as a threshold level.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,324,418 to Crowley et al in view of U.S. Patent 4,930,504 to Diamantopoulos et al. Crowley et al discloses a device for treating tissue that includes at least one light source

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with a wavelength of 300-500 nanometers (Col. 10, line 67). A control module (Fig. 1 # 8) that performs a variety of functions including: regulating the power delivered to the light source, converting the detected light from an analog to a digital signal, and providing the logical function and display driver to the indicators. The optical system includes filters for the light (Col. 10, line 23) and a lens (Col. 10, line 44). Crowley does not teach a treatment threshold power density. Diamantopoulos et al discloses treatment thresholds as described above. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the treatment thresholds of Diamantopoulos et al I the invention of Crowley et al to assure a minimum effective power level.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,896,457 to Tyrrel in view of U.S. Patent 4,930,504 to Diamantopoulos et al. Tyrrel teaches a device using multiple light sources, one of which is blue (Col. 11, line 26). The blue spectrum has as its shortest wavelength, 420 nanometers. Control circuitry is provided to enable the light source (Col. 10, line 21). The device includes optics in the form of a lens (Col. 12, line 35) to produce various patterns and an adjustable fixture for positioning the light (Fig. 1). Tyrrel does not teach a treatment threshold power density. Diamantopoulos et al discloses treatment thresholds as described above. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the treatment thresholds of Diamantopoulos et al I the invention of Crowley et al to assure a minimum effective power level.

The changes to the drawings filed 6/12/02 with the amendment have been approved by the examiner.

***Allowable Subject Matter***

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Claims 6, 7, 9, 15-20, 37-39 and 44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M Johnson, III whose telephone number is (703) 305-0910. The examiner can normally be reached on Monday through Friday from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on (703) 308-0994. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Hmj  
July 11, 2002

  
Lee Cohen  
Primary Examiner